

What is claimed is:

Suba! → 1. A method of controlling the intensity of a backlight included in a display device which also includes a screen and a first photo-sensor, the method comprising the steps of:

5 using said photo-sensor to detect the intensity of light incident on a first surface of the display device; and

8 adjusting the amount of power supplied to the backlight as a function of the detected light intensity.

1 2. The method of claim 1, further comprising the step of:

3 periodically repeating the step of adjusting the amount of power.

1 3. The method of claim 2, wherein the step of periodically repeating the step of adjusting the amount of power is performed automatically by the display device without user intervention.

1 4. The method of claim 3, wherein the screen is a transmissive liquid crystal display screen.

1 5. The method of claim 1, further comprising the step of:

3 receiving a brightness setting signal indicative of a user selected brightness level; and

5 wherein the step of adjusting the amount of
6 power supplied to the backlight is also performed as a
7 function of the received brightness setting signal.

1 6. The method of claim 5, wherein the first photo
2 sensor is a front photo sensor, wherein the first surface
3 is a front viewing surface of the display device; and
4 wherein the display device further includes a rear
5 photo-sensor, the method further comprising the steps of:

6 using the second photo-sensor to detect the
7 intensity of light incident on a rear portion of the
8 display device; and

9 wherein the step of adjusting the amount of
10 power supplied to the backlight is also performed as a
11 function of the detected intensity of light incident on
12 the rear portion of the display device.

1 7. The method of claim 5, wherein the display screen is
2 a transmissive display panel, the display device further
3 including a second photo-sensor mounted between the
4 backlight and a rear surface of the display panel, the
5 method further comprising the step of:

6 using the second photo-sensor to determine the
7 intensity of light incident on the rear surface of the
8 display panel; and

9 wherein the step of adjusting the amount of
10 power supplied to the backlight is also performed as a
11 function of the detected intensity of light incident on
12 the rear surface of the display panel.

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1 8. A method of controlling the intensity of a backlight
2 included in a display device which also includes a screen
3 and a rear photo-sensor, the method comprising the steps
4 of:

5 using the rear photo-sensor to detect the
6 intensity of light incident on a rear portion of the
7 display device; and

8 adjusting the amount of power supplied to the
9 backlight as a function of the detected light intensity.

1 9. The method of claim 8, further comprising the step
2 of:

3 periodically repeating the step of adjusting the
4 amount of power.

1 10. The method of claim 9, further comprising the step
2 of:

3 receiving a brightness setting signal
4 indicative of a user selected brightness level; and

5 wherein the step of adjusting the amount of
6 power supplied to the backlight is also performed as a
7 function of the received brightness setting signal.

1 11. The method of claim 10, wherein multiple user
2 selectable brightness settings are supported, one of the
3 brightness settings requiring less power than the other
4 supported brightness settings.

1 12. The method of claim 10, wherein the step of
2 periodically repeating the step of adjusting the amount

3 of power is performed automatically by the display device
4 without user intervention.

1 13. A display device, comprising:

2 a display panel;

3 a backlight positioned behind the display
4 panel;

5 a first photo-sensor for determining the
6 intensity of light impinging on a first portion of the
7 display panel; and

8 a backlight intensity control circuit for
9 controlling the intensity of the backlight as a function
10 of the determined intensity of light impinging on the
11 first portion of the display panel.

1 14. The display device of claim 13, wherein the first
2 portion of the display panel is a front portion; and
3 wherein the display panel includes a display screen and a
4 housing for mounting the display screen.

1 15. The display device of claim 14, wherein the display
2 screen includes a liquid crystal cell.

1 16. The display device of claim 15, wherein the first
2 photo-sensor is mounted on a front portion of the
3 housing.

1 17. The display device of claim 14, further comprising:
2 a user accessible brightness control coupled to
3 the backlight intensity control circuit.

1 18. The display device of claim 14, further comprising:
2 a second photo-sensor, coupled to the backlight
3 intensity control circuit, for determining the intensity
4 of light impinging on a second portion of the display
5 panel.

1 19. The display device of claim 18, wherein the second
2 portion of the display panel is a rear portion and
3 wherein the rear photo-sensor is mounted on a rear
4 portion of the housing.

5
6 20. The display device of claim 13, wherein the
7 intensity control module includes means for automatically
8 adjusting, on a periodic basis, backlight intensity.

1 21. A display device, comprising:
2 a display panel;
3 a backlight positioned behind the display
4 panel;
5 a rear photo-sensor for determining the
6 intensity of light impinging on a rear portion of the
7 display panel; and
8 a backlight intensity control circuit for
9 controlling the intensity of the backlight as a function
10 of the determined intensity of light impinging on the
11 rear portion of the display panel.

1 22. The display device of claim 21, wherein the
2 intensity control module includes means for automatically
3 adjusting, on a periodic basis, backlight intensity.

1 23. A portable computer device, comprising:

2 a display panel;

3 a backlight positioned behind the display
4 panel;

5 a front photo-sensor for determining the
6 intensity of light impinging on a front portion of the
7 display panel;

8 a backlight intensity control circuit for
9 controlling the intensity of the backlight as a function
10 of the determined intensity of light impinging on the
11 front portion of the display panel; and

12 a base portion, including a keyboard and a
13 central processing unit, connected to the display panel.

1 24. The portable computer device of claim 23, wherein
2 the display panel includes a transmissive liquid crystal
3 display screen and a housing, the computer device further
4 comprising:

5 a hinge for connecting the display panel to the
6 base portion.

1 25. The portable computer device of claim 24,

2 wherein the backlight intensity control
3 circuit is included in the base portion; and

4 wherein the backlight intensity control circuit
5 includes means for automatically adjusting, on a periodic
6 basis, backlight intensity.

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